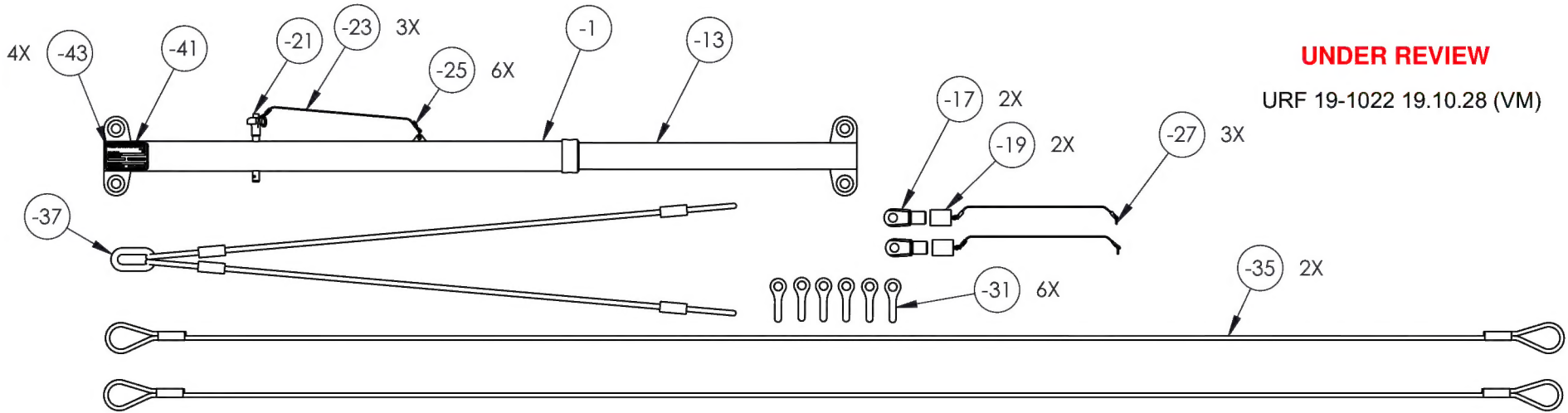


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REVISIONS			
REV	DESCRIPTION	DATE	INITIAL
			APPROVED



ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
	X		-1	1	WELDMENT			2
	1		-3		TUBE	STEEL	Ø2-1/4 .095 WALL X 35-7/8	3
	1		-5		SLEEVE	STEEL	Ø2-1/2 X .12 WALL X 1-1/4	4
1	1		-7		PLATE	A36 P & O	1/4 X 2-1/8 X 6-1/8	5
2	2		-9		BUSHING	STEEL	Ø1-1/4 X .281 WALL X 15/16	6
	1		-11		TAB	STEEL	1/8 X 1 X 1/2	7
X			-13	1	WELDMENT			8
1			-15		TELESCOPING TUBE	STEEL	Ø2 X .095 WALL X 53-1/4	9
			-17	2	FITTING	4140 Q & T	Ø1-1/2 X 3-1/8	10
			-19	2	CAP	NYLON	Ø1-5/16 X 1-5/8	11
		B/O	-21	1	BALL LOCK PIN	S.S.	Ø1/2 X 3 MCMaster-CARR #90293A414	1
		B/O	-23	3	LANYARD	STEEL	Ø1/16 X 17 CARR LANE #CL2C	1
		B/O	-25	6	FERRULE	ALUMINUM	Ø1/16 X 3/8 MCMaster-CARR #3896T31	1
		B/O	-27	3	SPLIT RING	STEEL	Ø1/2 MCMaster-CARR #90177A213	1
		B/O	-29	2	COTTER PIN	STEEL	Ø1/8 X 1/2 MCMaster-CARR #98338A170	1
		B/O	-31	6	SHACKLE	STEEL	1/2 CROSBY GROUP #1018455	1
		B/O	-35	2	CABLE	STEEL	Ø5/16 X 107-1/2 CABLE ASSY INSIDE EYE TO EYE THE CROSBY GROUP	1
		B/O	-37	1	CABLE ASSEMBLY		CROSBY GROUP	13
		B/O	-41	1	RED BARN PLACARD	ALUMINUM	RB41009	12
		B/O	-43	4	#2 DRIVE SCREW	COATED STEEL		1
ASSY -13	ASSY -1							

REF P/N 332A91 0031 01



RED BARN MACHINE

TITLE
HOISTING BEAM "AIR TRANSPORT"

DWG NO. RBE332A91-0031-01 REV

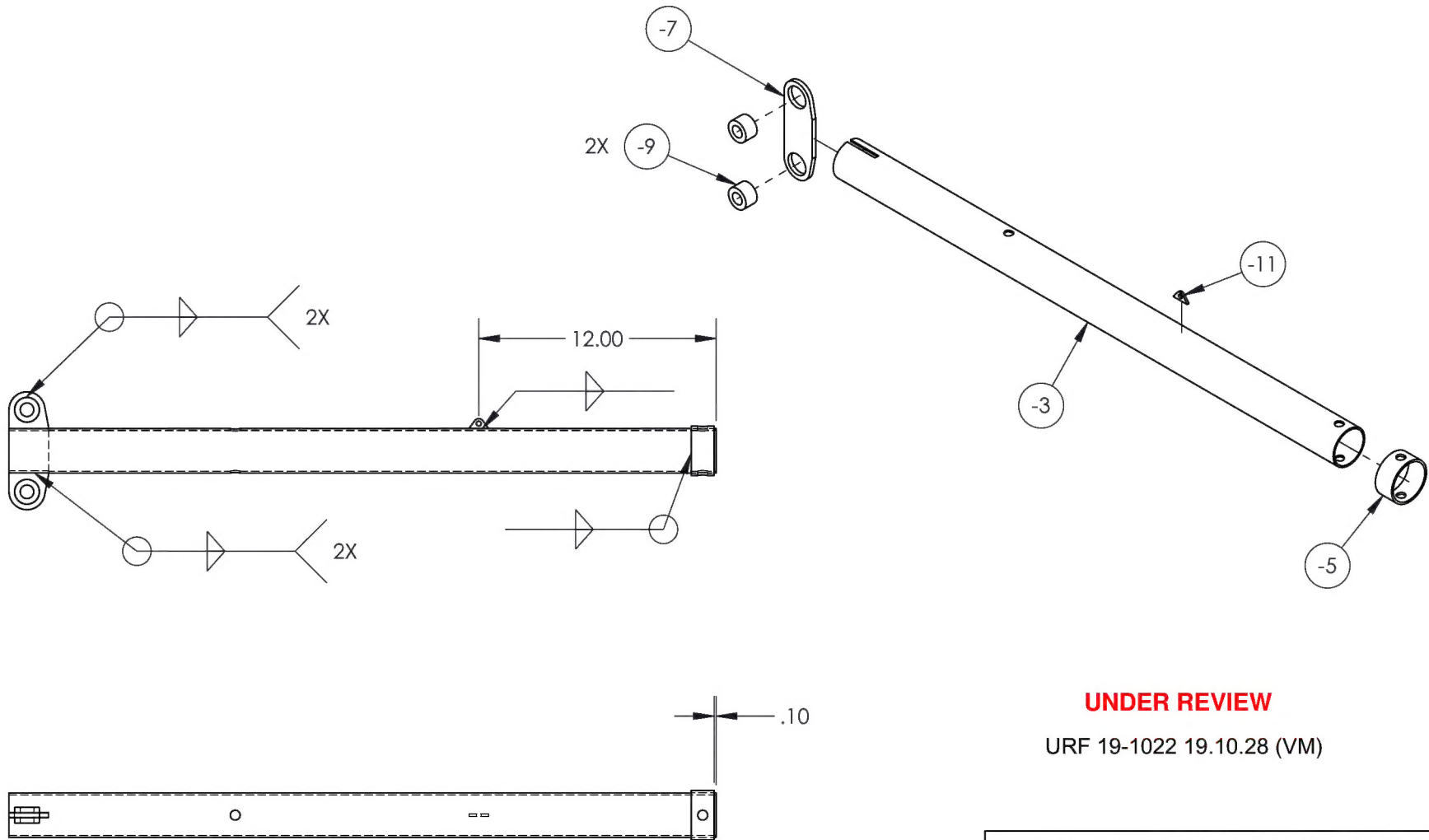
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON:
DECIMALS .XXX ± .005
.XX ± .01
.X ± .1
FRACTIONS ± 1/32
ANGLES ± 5°
DRAWN BY: GILBERT
APPROVED: D Weil
HEAT TREAT
FINISH
SPEC

UNLESS OTHERWISE SPECIFIED
1. BREAK ALL SHARP EDGES
.015 x 45° PR .015 R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING
USED ON MODEL
EUROCOPTER

SCALE 1:12 DATE 4/19/2011 SHEET 1 OF 14

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REVISIONS			
REV	DESCRIPTION	DATE	INITIAL



UNDER REVIEW

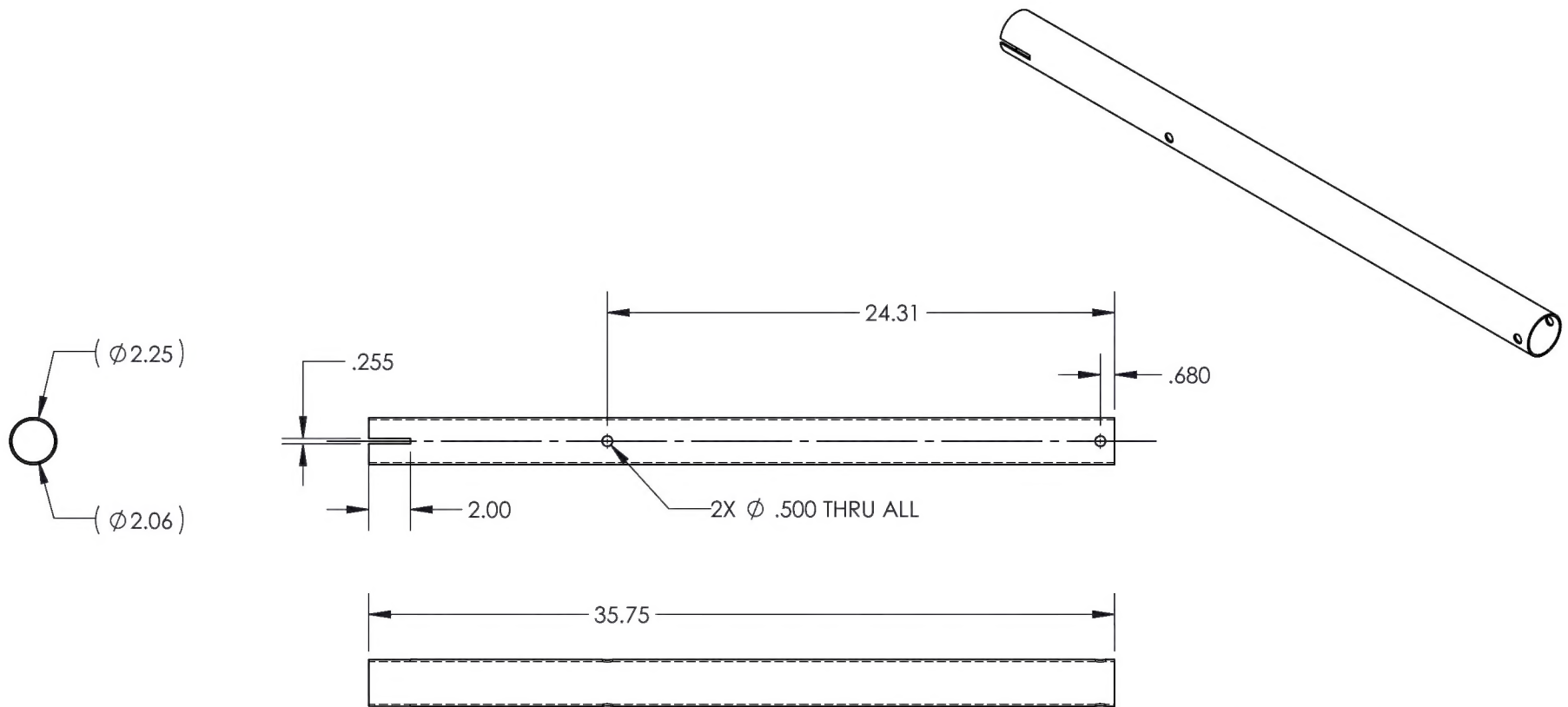
URF 19-1022 19.10.28 (VM)

(-1)
WELDMENT

 RED BARN MACHINE	
TITLE HOISTING BEAM "AIR TRANSPORT"	
DWG NO. RBE332A91-0031-01-1	REV
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 FRACTIONS ± 1/32 .XX ± .01 ANGLES ± 5° .X ± .1	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
DRAWN BY: GILBERT APPROVED: <i>D Weil</i> HEAT TREAT: FINISH: POWDER COAT YELLOW SPEC: FED #13538 USED ON MODEL: EUROCOPTER	
SCALE 1:8	DATE 4/19/2011
SHEET 2 OF 14	

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED




UNDER REVIEW

URF 19-1022 19.10.28 (VM)

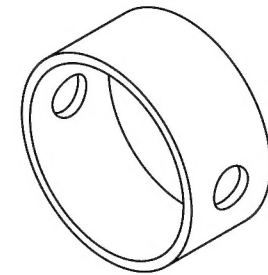
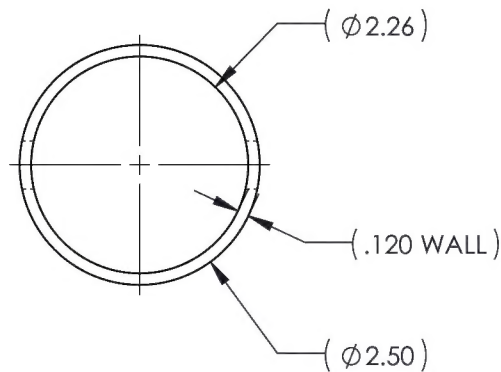
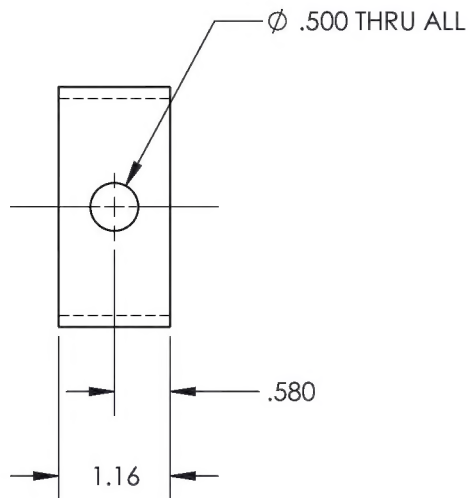
③

TUBE

 RED BARN MACHINE	
TITLE HOISTING BEAM "AIR TRANSPORT"	
DWG NO. RBE332A91-0031-01-3	REV
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 .X ± .1 FRACTIONS ± 1/32 ANGLES ± 5°	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
DRAWN BY: GILBERT APPROVED: <i>D Weil</i> HEAT TREAT FINISH SPEC USED ON MODEL EUROCOPTER	
SCALE 1:8	DATE 4/19/2011
SHEET 3 OF 14	

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED



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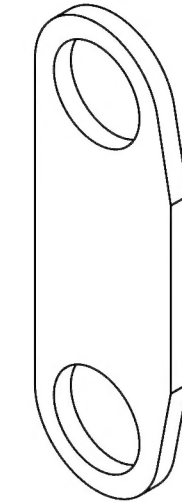
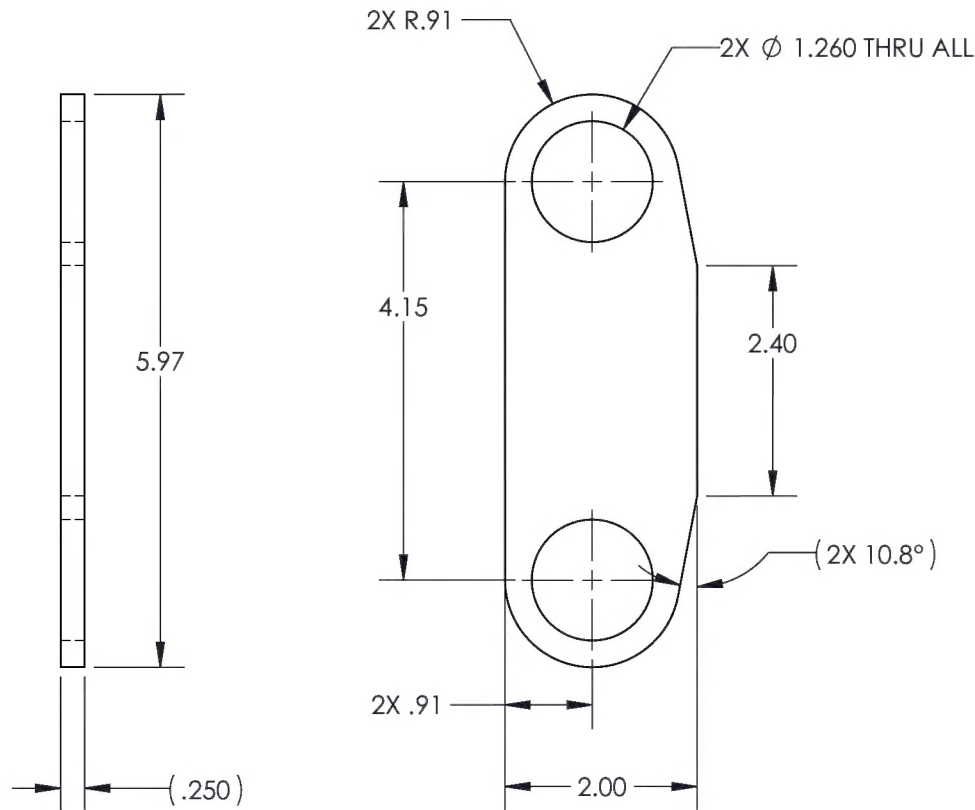
URF 19-1022 19.10.28 (VM)

(-5)
SLEEVE

 RED BARN MACHINE	
TITLE HOISTING BEAM "AIR TRANSPORT"	
DWG NO. RBE332A91-0031-01-5	REV
UNLESS OTHERWISE SPECIFIED TOLERANCES ON: DECIMALS .XXX $\pm .005$.XX $\pm .01$.X $\pm .1$	DRAWN BY: GILBERT APPROVED <i>D Weil</i> HEAT TREAT FINISH SPEC
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL EUROCOPTER
SCALE 1:2	DATE 4/19/2011
SHEET 4 OF 14	

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REVISIONS			
REV	DESCRIPTION	DATE	INITIAL




UNDER REVIEW

URF 19-1022 19.10.28 (VM)

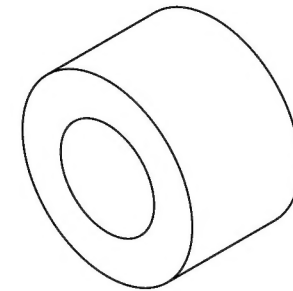
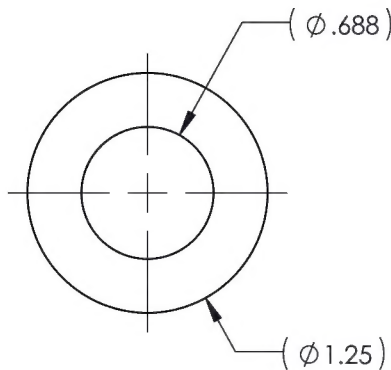
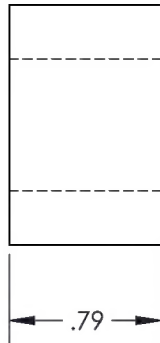
(-7)

PLATE

 RED BARN MACHINE	
TITLE HOISTING BEAM "AIR TRANSPORT"	
DWG NO. RBE332A91-0031-01-7	REV
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 .X ± .1 FRACTIONS ± 1/32 ANGLES ± 5°	DRAWN BY: GILBERT APPROVED <i>D Weil</i> HEAT TREAT FINISH SPEC
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL EUROCOPTER
SCALE 1:2	DATE 4/19/2011
SHEET 5 OF 14	

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED



UNDER REVIEW

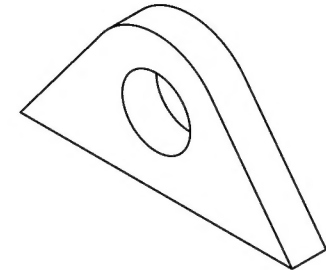
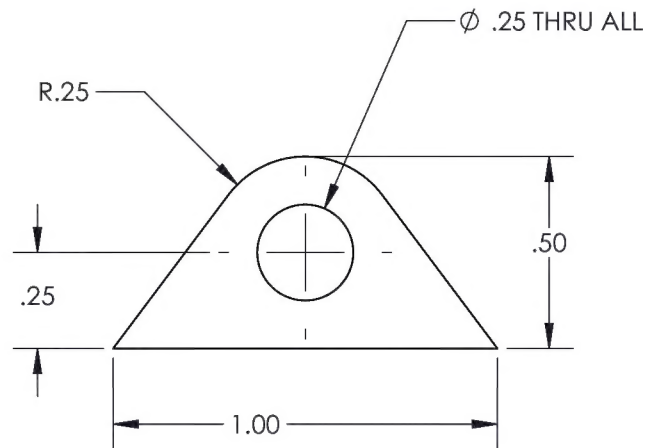
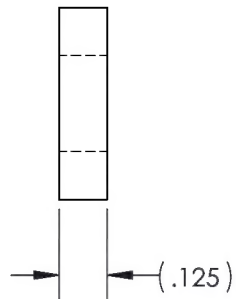
URF 19-1022 19.10.28 (VM)

⑨
BUSHING

 RED BARN MACHINE	
TITLE HOISTING BEAM "AIR TRANSPORT"	
DWG NO. RBE332A91-0031-01-9	REV
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 .X ± .1 FRACTIONS ± 1/32 ANGLES ± .5°	DRAWN BY: GILBERT APPROVED <i>D Weil</i> HEAT TREAT FINISH SPEC
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL EUROCOPTER
SCALE 1:1	DATE 4/19/2011
SHEET 6 OF 14	

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED




UNDER REVIEW

URF 19-1022 19.10.28 (VM)

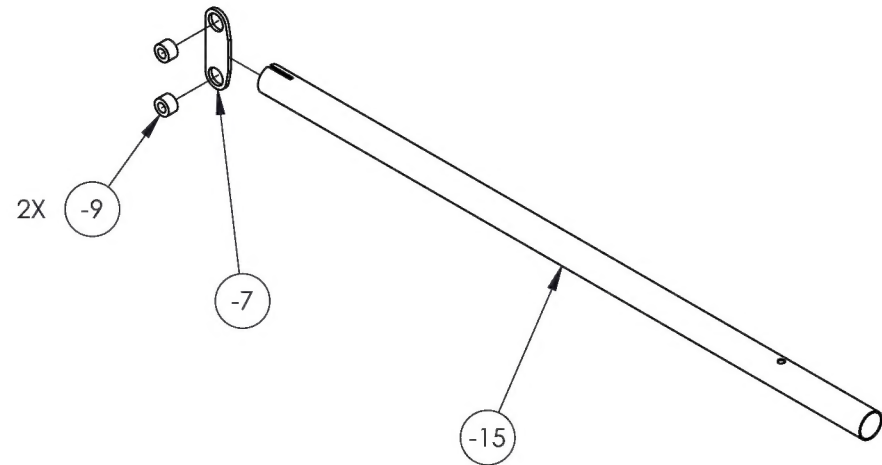
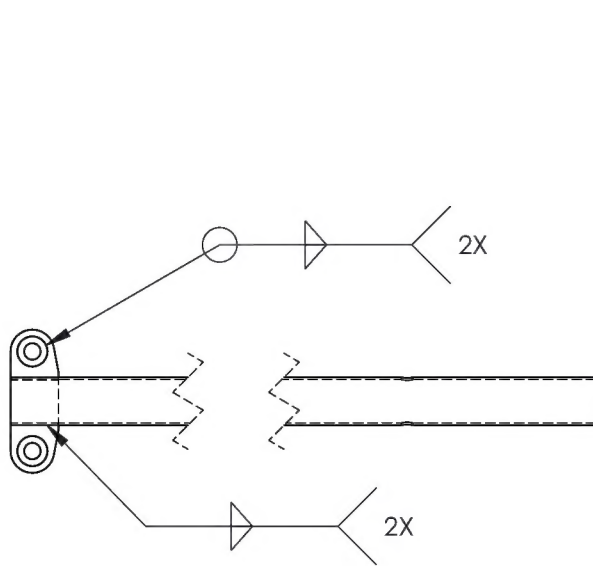
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TAB

 RED BARN MACHINE	
TITLE HOISTING BEAM "AIR TRANSPORT"	
DWG NO. RBE332A91-0031-01-11	REV
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 .X ± .1 FRACTIONS ± 1/32 ANGLES ± 5°	DRAWN BY: GILBERT APPROVED <i>D Weil</i> HEAT TREAT FINISH SPEC
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL EUROCOPTER
SCALE 2:1	DATE 4/19/2011
SHEET 7 OF 14	

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED




UNDER REVIEW

URF 19-1022 19.10.28 (VM)

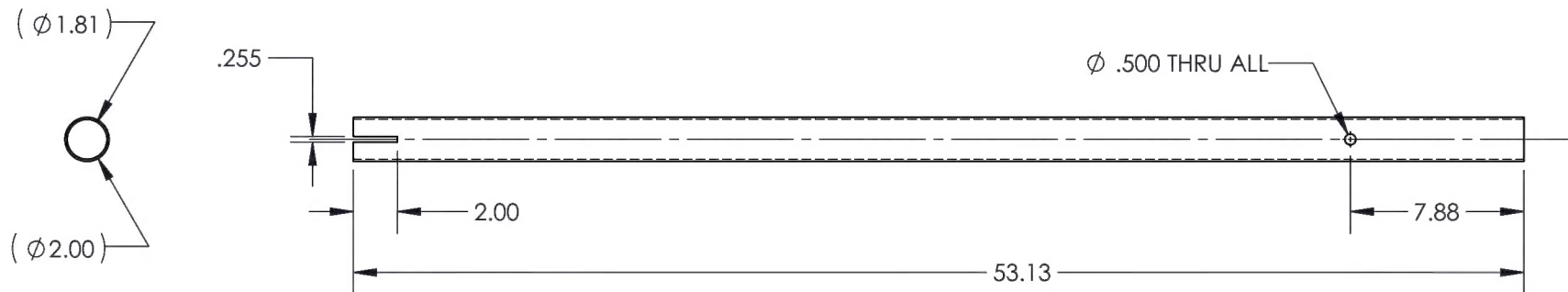
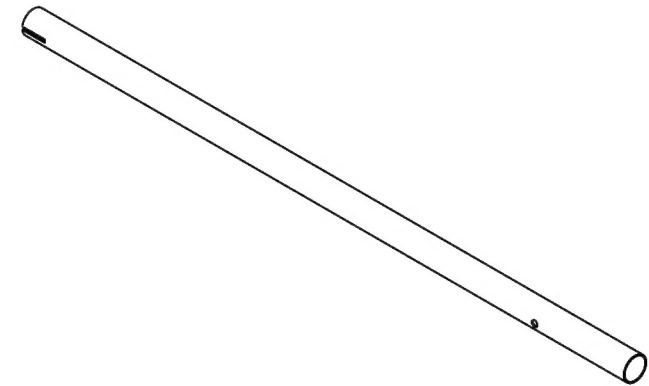
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WELDMENT

 RED BARN MACHINE	
TITLE HOISTING BEAM "AIR TRANSPORT"	
DWG NO. RBE332A91-0031-01-13	REV
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 .X ± .1 FRACTIONS ± 1/32 ANGLES ± 5°	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
DRAWN BY: GILBERT APPROVED: <i>D Weil</i> HEAT TREAT FINISH POWDER COAT YELLOW SPEC FED #13538 USED ON MODEL EUROCOPTER	
SCALE 1:8	DATE 4/19/2011
SHEET 8 OF 14	

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED



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URF 19-1022 19.10.28 (VM)

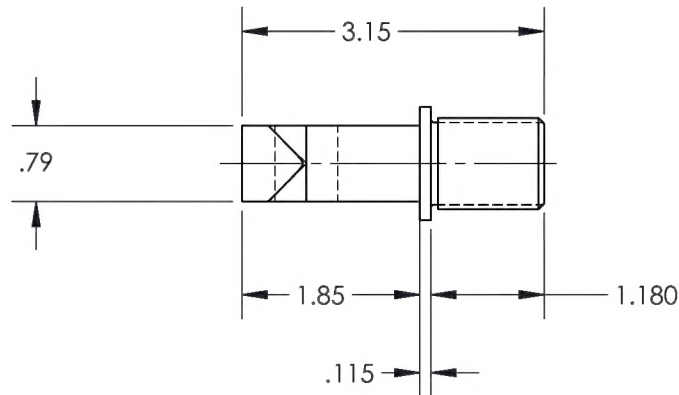
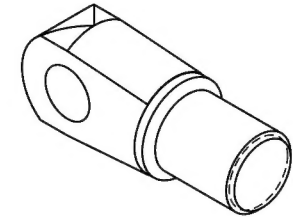
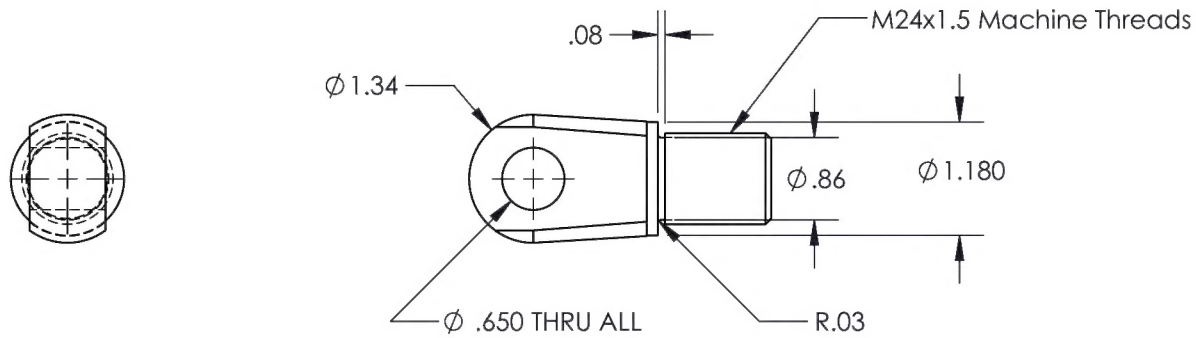
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TELESCOPING TUBE

 RED BARN MACHINE	
TITLE HOISTING BEAM "AIR TRANSPORT"	
DWG NO. RBE332A91-0031-01-15	REV
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 .X ± .1	
FRACTIONS ± 1/32 ANGLES ± 5°	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
DRAWN BY: GILBERT APPROVED: <i>D Weil</i> HEAT TREAT FINISH SPEC	
USED ON MODEL EUROCOPTER	
SCALE 1:8	DATE 4/19/2011
SHEET 9 OF 14	

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REVISIONS			
REV	DESCRIPTION	DATE	INITIAL



(-17)
FITTING

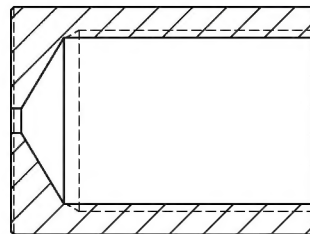
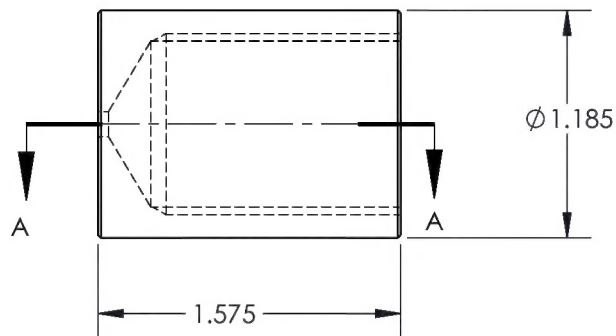
UNDER REVIEW

URF 19-1022 19.10.28 (VM)

 RED BARN MACHINE	
TITLE HOISTING BEAM "AIR TRANSPORT"	
DWG NO. RBE332A91-0031-01-17	REV
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 .X ± .1 FRACTIONS ± 1/32 ANGLES ± 5°	DRAWN BY: GILBERT APPROVED <i>D Weil</i> HEAT TREAT FINISH SPEC
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL EUROCOPTER
SCALE 1:2	DATE 4/19/2011
SHEET 10 OF 14	

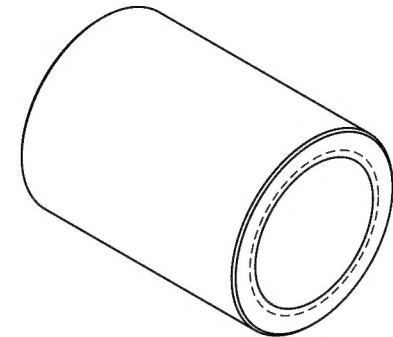
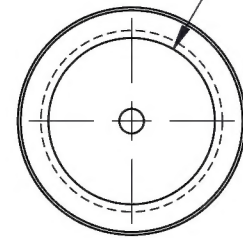
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REVISIONS			
REV	DESCRIPTION	DATE	INITIAL



SECTION A-A

$\varnothing .87 \nabla 1.30$
M24X1.5 - 6H $\nabla 1.22$




(-19)

CAP

UNDER REVIEW

URF 19-1022 19.10.28 (VM)

 RED BARN MACHINE	
TITLE HOISTING BEAM "AIR TRANSPORT"	
DWG NO. RBE332A91-0031-01-19	REV
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX $\pm .005$ FRACTIONS $\pm 1/32$.XX $\pm .01$ ANGLES $\pm 5^\circ$.X $\pm .1$	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
DRAWN BY: GILBERT APPROVED: <i>D Weil</i> HEAT TREAT FINISH: SPEC: USED ON MODEL: EUIROCOPTR	
SCALE 1:1	DATE 4/19/2011
SHEET 11 OF 14	

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED

RED BARN MACHINE	
	CAGE CODE 0E1A0
TOOL NUMBER	
RBE332A91-0031-01	
SERIAL NUMBER	
	WORKING LOAD 2250 LBF
TEST LOAD 4500 LBF	
sales@redbarn.net	Eugene, Oregon, USA

UNDER REVIEW

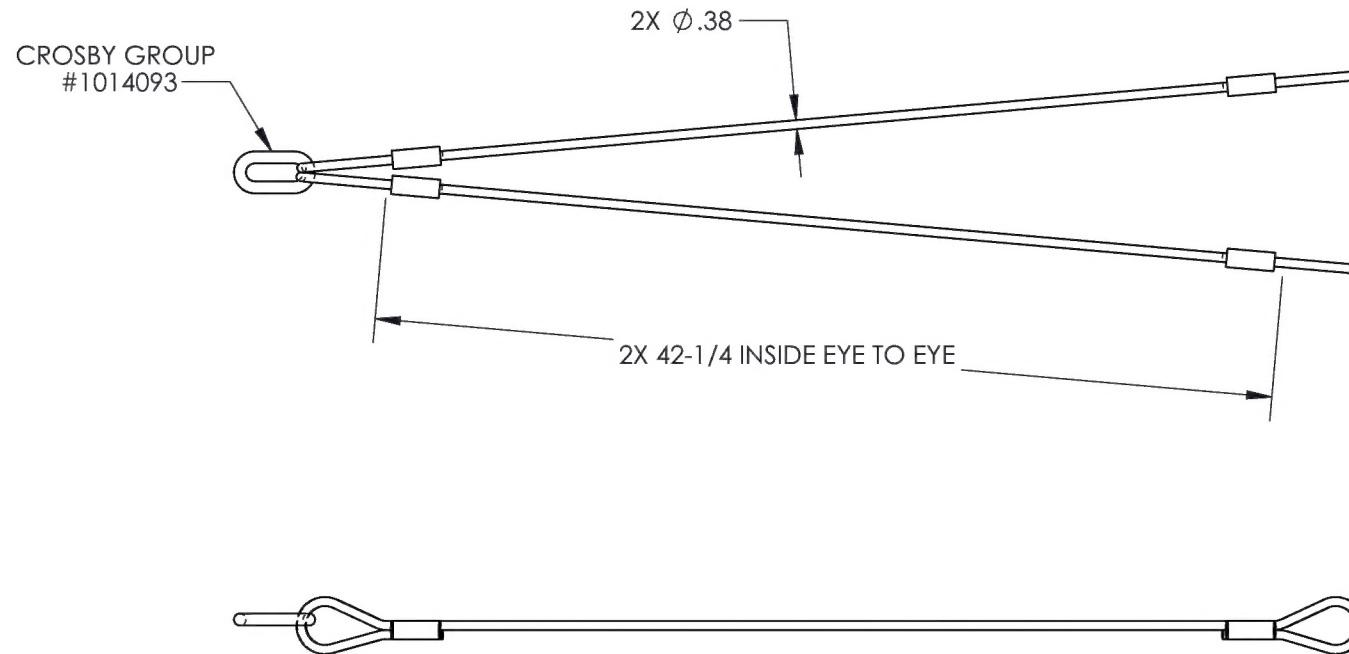
URF 19-1022 19.10.28 (VM)

(-41)
RB PLACARD

RED BARN MACHINE	
TITLE HOISTING BEAM "AIR TRANSPORT"	
DWG NO. RBE332A91-0031-01-41	REV
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 .X ± .1 FRACTIONS ± 1/32 ANGLES ± 5°	DRAWN BY: GILBERT APPROVED HEAT TREAT FINISH SPEC USED ON MODEL EUROCOPTER
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	DATE 4/19/2011
SCALE 1:1	SHEET 12 OF 14

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REV	DESCRIPTION	DATE	INITIAL
			APPROVED



UNDER REVIEW

URF 19-1022 19.10.28 (VM)

(-37)

CABLE ASSEMBLY

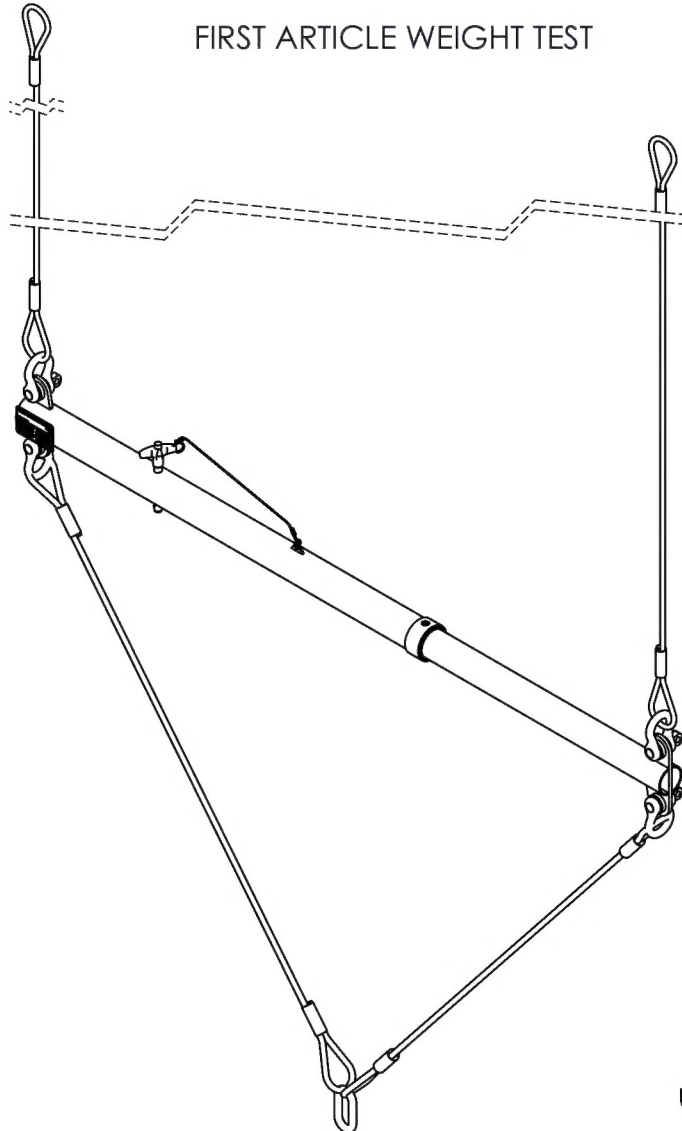
 RED BARN MACHINE	
TITLE HOISTING BEAM "AIR TRANSPORT"	
DWG NO. RBE332A91-0031-01-37	REV
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 .X ± .1 FRACTIONS ± 1/32 ANGLES ± 5°	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
DRAWN BY: GILBERT APPROVED: <i>D Weil</i> HEAT TREAT FINISH SPEC	
USED ON MODEL EUROCOPTER	
SCALE 1:8	DATE 4/19/2011
SHEET 13 OF 14	

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
1A	ADDED THIS SHEET	2/25/2011	JAG	

RED BARN MACHINE
190 S. DANEBO AVE., EUGENE OR. 97402
(541)344-9953; fax (541)344-3863
e-mail; sales@redbarn.net

FIRST ARTICLE WEIGHT TEST



INSPECTION & TESTING PROCEDURES FOR THE RBE332A91-0031-01, HOISTING BEAM "AIR TRANSPORT". THIS ASSEMBLY IS DESIGNED EXCLUSIVELY FOR HOISTING OR TOWING EUROCOTERS FOR AIR TRANSPORT. THIS ASSEMBLY SHOULD BE INSPECTED BEFORE EACH USE. REPLACE ANY ITEMS THAT ARE DAMAGED OR SUSPECTED OF DAMAGE BEFORE USING!

FIRST ARTICLE WEIGHT TEST

1. AFTER INSPECTION, USE BALL LOCK PIN TO LOCK 2 WELDMENTS TOGETHER. ATTACH HOISTING BEAM "AIR TRANSPORT" TO A OVERHEAD LIFTING DEVICE USING 2 CABLES AND SHACKLES. ATTACH 2 CABLES AND SHACKLES TO AN APPROPRIATE TEST WEIGHT OF 4500 LBS.
2. LIFT WEIGHT FOR AT LEAST 5 MINUTES, CONTINUALLY CHECKING FOR CRACKS, DEFLECTION, OR DISTORTION.
3. REMOVE WEIGHT AND RE-INSPECT BEAM, CHECKING FOR STRESS CRACKS, BENDING, OR DISTORTIONS.

INSPECTOR _____

TESTER _____

S.N. _____

DATE _____

UNDER REVIEW

URF 19-1022 19.10.28 (VM)

 RED BARN MACHINE	
TITLE	HOISTING BEAM "AIR TRANSPORT"
DWG NO.	RBE332A91-0031-01
REV	